

What is claimed is:

1. A digital camera comprising:

an image sensor disposed at a position at which  
5 an image is to be formed by a taking lens;

a recorder for recording on a recording medium  
an image sensed by said image sensor in accordance with  
recording instructions;

10 a semitransparent mirror which rotates about an  
axis in a direction perpendicular to the optical axis of  
the taking lens so as to move between an advanced  
position intersecting at an inclination the optical path  
from the taking lens to the image sensor, and a retracted  
position removed from the optical path; and

15 an optical finder providing an image by  
directing the light reflected by said semitransparent  
mirror set at the advanced position from the taking lens  
to the eye of an user.

20 2. A digital camera according to claim 1, wherein  
said semitransparent mirror is a quick return mirror.

3. A digital camera according to claim 1, wherein  
said image sensor is movable between a first position and  
25 a second position, and said image sensor is positioned in

the first position when said semitransparent mirror is in the retracted position and positioned in the second position when said semitransparent mirror is in the advanced position,

5                    wherein the second position with said semitransparent mirror intersecting the optical path and the first position without said mirror are optically equivalent with each other.

10                    4.                    A digital camera according to claim 3, wherein the first position and the second position are set so as to equalize the optical path length from the taking lens directly to said image sensor when said semitransparent mirror is set at the retracted position, and the optical  
15                    path length from the taking lens through said semitransparent mirror to said image sensor when said semitransparent mirror is set at the advanced position.

20                    5.                    A digital camera according to claim 3, wherein the first position and the second position are set so as to equalize the imaging position of an image formed by the taking lens directly on said image sensor when said semitransparent mirror is set at the retracted position, and the imaging position of an image formed by the taking  
25                    lens through said semitransparent mirror on said image

sensor when said semitransparent mirror is set at the advanced position.

6. A digital camera according to claim 1 further comprising a driver for moving the taking lens between a first position and a second position in a direction along the optical path, the first position and the second position are set so as to equalize the optical path length from the first position directly to said image sensor when said semitransparent mirror is set at the retracted position, and the optical path length from the second position through said semitransparent mirror to said image sensor when said semitransparent mirror is set at the advanced position.

7. A digital camera according to claim 1, wherein said digital camera is controllable under a first photographic mode wherein said semitransparent mirror is set at the advanced position until recording is instructed, and set at the retracted position when recording has been instructed, and returns to the advanced position again when said image sensor completes the sensing of the image, and a second photographic mode wherein said semitransparent mirror is set at the

advanced position regardless of whether or not the recording is instructed.

8. A digital camera according to claim 1 further  
5 comprising a display for displaying an image sensed by said image sensor.

9. A digital camera according to claim 8, wherein  
10 said digital camera is controllable under a first photographic mode wherein said semitransparent mirror is set at the advanced position until recording is instructed, and set at the retracted position when recording has been instructed, and a second photographic mode wherein said semitransparent mirror is set at the  
15 retracted position regardless of whether or not the recording is instructed.

10. A digital camera comprising:  
an image sensor disposed at a position at which  
20 an image is to be formed by a taking lens; and  
an optical element movable between an advanced position intersecting at an inclination the optical path from the taking lens to said image sensor, and a retracted position removed from the optical path,

wherein said digital camera is controllable under a first photographic mode wherein said optical element is set at the advanced position for photography, and a second photographic mode wherein said optical  
5 element is set at the retracted position for photography, and the optical path lengths from the taking lens to said image sensor are equalized in the first photographic mode and the second photographic mode by moving the taking lens in a direction along the optical axis of the taking  
10 lens.

11. A digital camera according to claim 10, wherein said optical element is at least a single element for photography.

12. A digital camera according to claim 11, wherein said optical element is at least one of semitransparent mirror, infrared cutting filter, spatial modulation  
15 element and ND filter.

20 13. A digital camera according to claim 10, wherein said optical element is moved between the advanced position and the retracted position by rotation.

14. A digital camera according to claim 10, wherein said optical element is moved between the advanced position and the retracted position by a movement other than rotation.

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15. A digital camera according to claim 10, wherein said image sensor is movable between a first position and a second position, and said image sensor is positioned in the first position when said optical element is in the retracted position and positioned in the second position when said optical element is in the advanced position,

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wherein the second position with said optical element intersecting the optical path and the first position without said optical element are optically equivalent with each other.

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16. A digital camera according to claim 15, wherein the first position and the second position are set so as to equalize the optical path length from the taking lens directly to said image sensor when said optical element is set at the retracted position, and the optical path length from the taking lens through said optical element to said image sensor when said optical element is set at the advanced position.

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17. A digital camera according to claim 15, wherein  
the first position and the second position are set so as  
to equalize the imaging position of an image formed by  
the taking lens directly on said image sensor when said  
5 optical element is set at the retracted position, and the  
imaging position of an image formed by the taking lens  
through said optical element on said image sensor when  
said optical element is set at the advanced position.